

WE CLAIM:

1. A communication network, comprising:
a network node;
5 a first terminal having a first modem connected to said network node via a master
communication loop; and
a second terminal having a second modem also connected to said network node via said
master communication loop, wherein said first and second terminals are adapted to communicate
with said network node and each other with signals compatible with ADSL standards.

2. The communication network as specified in Claim 1 wherein said first terminal and said
second terminal are locally proximate one another.

3. The communication network as specified in Claim 2 wherein said master communication
15 loop comprises a twisted pair of conductors.

4. The communication network as specified in Claim 2 wherein said network node is
adapted to permit and enable said first terminal to communicate with said second terminal via
said network node.

5. The communication network as specified in Claim 4 wherein said first terminal initiating
a communication with said second terminal maintains a superframe.

6. The communication network as specified in Claim 5 wherein said network node directs
25 said first terminal to maintain the superframe.

7. The communication network as specified in Claim 1 wherein said first terminal and said
second terminal are adapted to simultaneously communicate over said common master
~~communication loop with said network node.~~

8. The communication network as specified in Claim 1 wherein each said first terminal and said second terminal are adapted to communicate over said common master communication loop using a technique selected from the group consisting of: time division, frequency division, and
5 code division.

9. The communication network as specified in Claim 2 wherein said network node is a central office (CO) located remote from both said first and second terminal.

10. The communication network as specified in Claim 1 wherein said first terminal is a personal computer

11. A modem adapted for use at a network node, comprising;
a transceiver adapted to communicate information with a remote first terminal over a
15 master communication loop with signals compatible with ADSL standards, wherein said transceiver is further adapted to communicate with a second remote terminal over said same master communication loop with signals compatible with ADSL standards.

12. The modem as specified in Claim 11 wherein said first and second terminals are adapted
20 to be co-located, said modem being adapted to facilitate communications between each said terminal over said common master communication loop.

13. The modem as specified in Claim 12 wherein said master communication loop comprises a twisted pair of conductors.

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14. The modem as specified in Claim 12 wherein said modem establishes said first terminal initiating a communication as a master maintaining a superframe.

15. The modem as specified in Claim 14 wherein said modem is adapted to simultaneously

communicate with said first terminal and said second terminal.

16. The modem as specified in Claim 15 wherein said modem facilitates said simultaneous communication using a technique selected from the group consisting of: time division, frame
5 division and code division.

17. A method of communicating signals compatible with ADSL standards over a communication network comprising:

a network node;

10 a first terminal having a first modem connected to said network node via a master communication loop;

a second terminal having a second modem also connected to said network node via said master communication loop, wherein said first and second terminals are adapted to communicate with said network node and each other with signals compatible with ADSL standards;

15 comprising the steps of:

said first terminal initiating a communication towards said second terminal via said common master communication loop; and

said network node directing said first terminal to maintain a superframe.

20 18. The method as specified in Claim 17 further comprising the step of said network node facilitating said communication between said first terminal and said second terminal using a technique selected from the group consisting of: time division, frame division, and code division.

19. The method as specified in Claim 17 wherein said master communication loop comprises

25 a single twisted pair of conductors.

20. The method as specified in Claim 17 wherein said network node facilitates simultaneous communications between said first terminal and said second terminal over said master communication loop.